

ABSTRACT

[0051] The invention relates to for processing an electromagnetic input signal, wherein the signal is passed through an input to be modified across a plurality of modifying segments using a characteristic of the signal, and wherein the plurality of segments have a plurality of states controlled by a control signal, by determining a reference impedance for the input for one or more states of the plurality of segments; and adaptively adjusting impedance of the input toward the reference impedance. This may be accomplished for example, by using a matching circuit comprising one or more selected from the group consisting of a digital signal processor, a microprocessor, a logic circuit, an integrated circuit, a phase shifter, a resistor, a variable inductor, and a variable capacitor. The matching circuit determines shifts in impedance of the input after a change in state of the segments; and adaptively adjusts the impedance based upon the shift.